# **Additions**



## **Building Inspections**

The Minnesota State Building Code and Richfield City Code provide minimum standards for creating an environment of health and safety for all Richfield residents.

#### Permits:

The following must be submitted before a permit can be issued.

- 1. A site plan survey or scale drawing by the owner or applicant, showing the following information:
  - a) Lot size and all adjacent public streets.
  - b) Exact location, dimensions and distances to property lines of all existing and proposed buildings on lot.
  - c) Owner must be able to show corner monuments on the site to verify setback distances prior to footing inspection.
  - d) Provide proposed and existing grade elevations on survey or site plan.
- 2. A completed permit application with description of all proposed work.
- 3. Two sets of construction plans drawn to scale with dimensions showing the following:
  - a) A floor plan indicating the following:
  - Proposed addition including all dimensions.
  - Size and spacing of floor joists.
  - Size of decking.
  - Size, location and spacing of posts.
  - Size of all beams supporting loads.
  - Size and spacing of roof rafters or trusses.
  - Plan of adjoining rooms with window and door sizes.
  - Submittals showing compliance of the 2015 Minnesota Energy Conservation code.
  - b) Cross section of side view and a rear view indicating the following:
  - Diameter and depth of footings including landings and stair footings.
  - Size of posts and method of anchorage to footings.
  - Header size supporting floor joists.
  - Floor joist size, spacing and type of lumber.
  - Flooring materials.
  - Guardrail height (if any) see attached handout.
  - Ceiling height.

## Additions (continued)

- Header size over glazed and screened openings.
- Type(s) of sheathing and siding materials.
- Size and spacing of roof rafters or trusses.
- Pitch of roof.
- c) Elevations drawings indicating the following:
- Height of structure from established grade.
- Size of headers.
- Type of roof covering materials.
- 4. All permit fees are based on a published fee schedule. This schedule can be obtained from the Building & Inspections Division.

#### Setbacks:

	Front	Rear	Side interior	Side street side
R District (single family)	30'	25'	5'	12'
R-1 District (low density single family)	30'	25'	10'	15'

NOTE: Measure setbacks from the property line, not the curb. The property line is generally located 12 to 13 feet back from the curb.

Lot coverage: The maximum area of a lot that buildings can cover is 35 percent of lot area. Impervious coverage: The maximum impervious area is 45 percent of total lot area.

## Framing:

- 1. Base plates on concrete shall be treated wood.
- 2. Studs supporting floors shall be spaced not more than 16 inches o.c. Studs of 2" x 4" construction, not more than 10 feet in height and supporting ceiling and roof only may be spaced 24 inches o.c. Where the studs are spaced 24 inches o.c., framing above must be centered over studs.
- 3. Rafters shall be nailed to adjacent ceiling joists to form a continuous tie between exterior walls when such joists are parallel to the rafter. When not parallel, rafters shall be tied to 2 x 4 inch minimum cross ties. Rafter ties shall not be spaced more than 4 feet o.c.

## Additions (continued)

## **Light, Ventilation & Ceiling Height:**

- 1. All habitable rooms shall have a window area equal to at least 8 percent of floor area, one half of which shall be openable. For the purpose of determining light and ventilation requirements, any room may be considered as a portion of an adjoining room when one-half of the area of the common wall is open and unobstructed. The common wall should provide an opening of not less than one-tenth of the floor area of the interior room or 25 square feet, whichever is greater. Required windows shall open directly onto a street or public alley, or a yard or court located on the same lot as the building.
- 2. Minimum ceiling height is 7 feet.
- 3. Egress windows are required for basement and sleeping room additions. See Egress window handout.

## **Smoke Detectors:**

Smoke detector installation is required for all homes when interior alterations, repairs, or additions requiring a permit occur, or when one or more sleeping rooms are added or created.

Smoke detectors must be both hard wired and battery powered, and must be interconnected.

Smoke detectors in existing areas may be battery powered only where the alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure unless there is an attic, crawl space, or basement available which could provide access for hard wiring and interconnection without the removal of interior finishes.

Smoke detectors are required:

- In each sleeping room (bedroom).
- Outside of each separate sleeping room in the immediate vicinity of the bedrooms.
- On each additional story of the dwelling, including basements but not including crawl spaces and uninhabitable attics.

Smoke detectors must be updated, in working order and installed in each of these locations, even if the work completed is not located specifically in those areas. For example, if windows are installed in the upper level, a smoke detector is still required in the basement.

**Carbon monoxide detection:** Carbon monoxide alarms shall be installed outside and not more than 10 feet of each separate sleeping area or bedroom.

Smoke and carbon monoxide detectors must be installed and in working order BEFORE a final inspection or a \$35.00 reinspection fee may be charged.

#### Foam Plastic Insulation: R316

Must be of an approved type and shall be separated from the interior of a building by an **approved** thermal barrier of minimum ½ "gypsum board or equivalent 15 minute thermal barrier. Within attics or crawl spaces, foam plastic insulation shall be protected against ignition using one of the following ignition barrier materials: ¼" wood structural panels, 3/8" particle board, 1 ½" mineral fiber insulation, or 3/8" gypsum board or equivalent.

**NOTE:** PLUMBING, HEATING & ELECTRICAL - Require separate permits and inspections. Roughin and final inspections are required.

## **Required inspections:**

- 1. FOOTING INSPECTIONS: Shall be scheduled and inspected after forms and reinforcing are in place but prior to the placement of any concrete.
- 2. FOUNDATION INSPECTION: Shall be scheduled and inspected after foundation insulation, waterproofing and dampproofing are in place but prior to backfilling.
- 3. SHEATHING INPECTION: Before water resistive barrier is applied and sheathing has been completed.
- 4. HOUSE WRAP INSPECTION: After incorporating pan flashing, penetration wrappings and flashing for doors, windows and other penetrations in conjunction with a water resistive barrier to prevent water intrusion within the building envelope.
- 5. FRAMING INSPECTION: Shall be completed after the rough-in inspection of plumbing, heating and electrical installations, but prior to the placement of any insulation or covering material.

  Means of assuring proper attic ventilating and markers for attic insulation depth must be in place.
- 6. INSULATION INSPECTION: Shall be made prior to installation of interior finish. Required vapor barriers must be in place and sealed.
- 7. FIREPLACES Must be inspected during construction.
- 8. FINAL INSPECTION Shall be made after the structure is completed. Electrical, plumbing and mechanical must pass final inspections prior to final inspection for occupancy.

#### **General Notes:**

- 1. Plan review and building permit issuance normally require seven (7) working days from receipt of the complete application. You will be contacted when the permit is ready.
- The approved for code compliance stamped plan, survey and permit card shall be posted and available on the job site until the final inspection has been approved. The Inspection Record card shall be posted in an accessible area or wall of the addition. Cards shall be protected from the weather.